

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for ensuring confidentiality of signal transmission in a point to multipoint data transmission network, wherein the data transmission network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the method comprising:

 receiving ~~transmitting~~ an upstream signal from a first station;

 reflecting said upstream signal by at least two disturbing reflectors to produce ~~[[a]]~~ at least two disturbing reflection signals; and

 combining said at least two disturbing reflection signals with a ~~second~~ an unwanted reflection signal of said upstream signal produced by a reflecting element such that ~~by one of the at least two disturbing reflectors to render~~ said ~~second~~ unwanted reflection signal is rendered undecodable by a second station; ~~to ensure confidentiality of signal transmission in a point-to-multipoint data transmission network.~~

 wherein said at least two disturbing reflectors are located in a single branch of the data transmission network.
2. (Cancelled)
3. (Currently Amended) The method according to claim 1, wherein the ~~transmitting of said upstream signal is received through~~ comprises using a transmission medium that comprises an optical fiber.

4. (Currently Amended) The method according to claim ~~[[3]]~~ 1, wherein, ~~in the transmitting of said upstream signal,~~ said data transmission network comprises an Ethernet passive optical network and said first station comprises an optical network unit.

5. (Currently Amended) The method according to claim ~~[[3]]~~ 1, wherein, ~~in the reflecting of said upstream signal,~~ said at least two disturbing reflectors comprise at least two discrete reflectors.

6. (Currently Amended) The method according to claim ~~[[3]]~~ 1, wherein, ~~in the reflecting of said upstream signal,~~ said at least two disturbing reflectors comprise ~~at least two~~ a single long continuous reflector~~[[s]]~~.

7. (Cancelled)

8. (Currently Amended) A system for ensuring confidentiality of signal transmission in a point to multipoint data transmission network, wherein said data transmission network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the system ~~further~~ comprising:

at least two disturbing reflectors positioned ~~placed~~ upstream of a first station and a possible point of eavesdropping in ~~[[a]]~~ the point-to-multipoint data transmission network, wherein ~~at least one of the said~~ at least two disturbing reflectors ~~[[is]]~~ are configured to produce ~~[[a]]~~ at least two disturbing reflection signals of ~~[[a]]~~ an upstream signal received ~~transmitted~~ from said first station, and further wherein said at least two disturbing reflection signals are combined with an unwanted reflection signal of said upstream signal, wherein the unwanted reflection signal is produced by a reflecting element; by said first station to ensure confidentiality of signal transmission in said point-to-multipoint data transmission network, to combine said

~~disturbing reflection with a second reflection of said signal from one of the at least two disturbing reflectors;~~

wherein said at least two disturbing reflectors are located in a single branch of the data transmission network.

9. (Cancelled)

10. (Previously Presented) The system according to claim 8, wherein said transmission medium comprises an optical fiber.

11. (Currently Amended) The system according to claim 10, wherein said data transmission network comprises an Ethernet passive optical network and said first station comprises an optical network unit.

12. (Previously Presented) The system according to claim 10, wherein said at least two disturbing reflectors comprise at least two discrete reflectors.

13. (Currently Amended) The system according to claim 10, wherein said at least two disturbing reflectors comprise ~~at least two~~ a single long continuous reflector[[s]].

14-20. (Cancelled)

21. (Currently Amended) A transmission apparatus, comprising:

at least one optical splitter;

at least one connector for an optical network unit; and

at least two disturbing reflectors configured to produce [[a]] at least two disturbing reflection signals of [[a]] an upstream signal ~~transmitted by~~ received from the optical network unit; ~~a first station and to make said disturbing reflection to combine with a second reflection of said signal from one of the at least two disturbing reflectors.~~

wherein said at least two disturbing reflection signals are combined with an unwanted reflection signal of said upstream signal produced by a reflecting element;

wherein said at least two disturbing reflectors are located in a single branch of a data transmission network.

22. (Cancelled)

23. (Currently Amended) The transmission apparatus according to claim [[22]] 21, wherein said at least two disturbing reflectors comprise at least ~~one~~ two discrete reflectors.

24. (Currently Amended) The transmission apparatus according to claim [[22]] 21, wherein said at least two disturbing reflectors comprise a single ~~at least two~~ long continuous reflector[[s]].

25. (Cancelled)

26. (Currently Amended) A point-to-multipoint data transmission network, comprising:

at least one hub;

at least one transmission medium;

at least one station connected to said hub via said at least one transmission medium;

receiving-transmission means for receiving ~~transmitting~~ an upstream signal from a first station;

reflection means for producing [[a]] at least two disturbing reflection signals; and

combination means for combining said at least two disturbing reflection signals with a

~~second~~ an unwanted reflection signal of said upstream signal ~~from the reflection means~~ such that
~~to render~~ said ~~second unwanted reflection signal~~ is rendered undecodable by a second station[.];

wherein said reflection means are located in a single branch of the data
transmission network.

27. (Currently Amended) A system for ensuring confidentiality of signal transmission in a network, wherein the network comprises at least one hub, at least one transmission medium and at least one station connected to said hub via said at least one transmission medium, the system ~~further~~ comprising:

at least two disturbing reflection means, ~~placed~~ positioned upstream of a first station and a possible point of eavesdropping in the network[.,] for producing [[a]] at least two disturbing reflection signals of [[a]] an upstream signal transmitted [[by]] from said first station, wherein said at least two disturbing reflection signals are [[is]] combined with ~~a second~~ an unwanted reflection signal of said upstream signal, wherein the unwanted reflection signal is produced by
~~from one of the at least two disturbing~~ a second reflection means[.];

wherein said at least two disturbing reflection means are located in a single branch
of the network.

28. (Currently Amended) A transmission network comprising:

at least one hub;

at least one transmission medium;

at least one station connected to said hub via said at least one transmission medium; and

at least two disturbing reflection means, ~~placed~~ positioned upstream of a first station and a possible point of eavesdropping in said transmission network, for producing [[a]] at least two

disturbing reflection signals of ~~[[a]]~~ an upstream signal received ~~transmitted by from~~ said first station, wherein said at least two disturbing reflection signals ~~[[is]]~~ are combined with ~~a second~~ an unwanted reflection signal of said upstream signal, wherein the unwanted reflection signal is produced by a second reflecting means; from one of the at least two disturbing reflection means.

wherein said at least two disturbing reflection means are located in a single branch of the transmission network.

29. (Currently Amended) A transmission apparatus, comprising:

at least one optical splitters;

at least one connector for an optical network unit; and

at least ~~one~~ two disturbing reflection means, ~~placed~~ positioned upstream of a first station and a possible point of eavesdropping in a transmission network~~[[,]]~~ for producing [a] at least two disturbing reflection signals of ~~[[a]]~~ an upstream signal received ~~transmitted~~ ~~[[by]]~~ from said first station, wherein said at least two disturbing reflection signals ~~[[is]]~~ are combined with a ~~second~~ an unwanted reflection signal of said upstream signal, wherein the unwanted reflection signal is produced by a second reflecting means; from one of the at least two disturbing reflection means.

wherein said at least two disturbing reflection means are located in a single branch of the transmission network.